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instructing an unmanned aerial vehicle (“UAV”) located in the AFC to engage the item;  
 instructing the UAV to depart the AFC; and  
 instructing the UAV to navigate to a delivery location within the metropolitan area and disengage the item at the delivery location. 5

2. The computer implemented method of claim 1, further comprising:  
 instructing the UAV to navigate to a shuttle replenishment location and land in a shuttle after the item has been disengaged, wherein the shuttle transports the UAV to the AFC while the AFC is airborne. 10

3. The computer implemented method of claim 1, wherein at least a portion of the navigation to the delivery location is part of a descent from the AFC and the UAV utilizes reduced power during at least a portion of the descent. 15

4. The computer implemented method of claim 3, wherein the UAV includes a wing and is configured to glide toward the delivery location as it descends.

5. The computer implemented method of claim 1, further comprising: instructing, as the UAV enters a UAV network, the UAV to engage one or more motors of the UAV to slow a descent of the UAV and provide lift for the UAV to complete navigation to the delivery location. 20

6. A system for delivering an ordered item to a user, the system comprising: 25

- an aerial fulfillment center (“AFC”) that is airborne at an altitude and configured to receive and store a plurality of inventory items;
- a shuttle configured to transport inbound items to the AFC while the AFC is airborne; 30
- a plurality of UAVs located at the AFC and configured to transport items from the AFC to delivery locations, while the AFC is airborne; and
- an inventory management system that sends an instruction directing a UAV of the plurality of UAVs to transport the ordered item from the AFC to a delivery location while the AFC is airborne. 35

7. The system of claim 6, wherein the UAV is further configured to descend from the AFC at a reduced power level while navigating toward the delivery location. 40

8. The system of claim 6, wherein the AFC includes an airship and is positioned at an altitude above a commercial airspace.

9. The system of claim 6, wherein the shuttle includes an airship and is configured to travel to and from the AFC while the AFC is airborne. 45

10. The system of claim 6, wherein the inbound items include at least one of a UAV, an inventory item, supplies, fuel, materials handling equipment, or humans. 50

11. The system of claim 6, wherein:  
 the shuttle is further configured to transport outbound items from the AFC; and  
 the outbound items include at least one of overstock inventory, transshipment inventory, damaged inventory, waste, materials handling equipment, or humans. 55

12. The system of claim 6, further comprising:  
 a UAV network including a plurality of UAVs at an altitude lower than the AFC, wherein the plurality of UAVs are configured to deliver inventory items to users. 60

13. The system of claim 6, wherein the UAV is further configured to at least:  
 disengage the ordered item at the delivery location; and  
 navigate to a shuttle replenishment location that includes a shuttle, wherein the shuttle is configured to transport the UAV back to the AFC. 65

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14. The system of claim 6, wherein the AFC is further configured to at least:  
 present an advertisement for a second item maintained in an inventory of the AFC;  
 receive a second order tier the second item;  
 deploy a UAV of the plurality of UAVs from the AFC to deliver the second item while the AFC is airborne; and  
 update the advertisement.

15. A non-transitory computer-readable storage medium storing instructions, the instructions when executed by a processor causing the processor to at least:  
 receive an order for an item;  
 determine a delivery location for the item;  
 determine an aerial fulfillment center (“AFC”) within a range of the delivery location, wherein the AFC is airborne at an altitude and configured to enable deliver of items using unmanned aerial vehicles (“UAV”) deployed from the AFC; and  
 designating the AFC for delivery of the item.

16. The non-transitory computer-readable storage medium of claim 15, wherein the instructions when executed by the processor further cause the processor to direct the AFC to deploy a UAV that includes the item from the AFC.

17. The non-transitory computer-readable storage medium of claim 16, wherein the instructions when executed by the processor further cause the processor to instruct the UAV to at least:  
 navigate to the delivery location and disengage the item at the delivery location; and  
 navigate from the delivery location to a shuttle replenishment location that includes a shuttle that will transport the UAV back to the AFC.

18. The non-transitory computer-readable storage medium of claim 17, wherein the instructions when executed by the processor further cause the processor to instruct the shuttle to at least:  
 receive a plurality of inbound items to be transported to the AFC while the AFC is airborne, wherein the inbound items include at least one of inventory, the UAV, a human, supplies, materials handling equipment, or fuel;  
 depart a shuttle replenishment location and navigate to the AFC while the AFC is airborne; and  
 dock with the AFC so that the inbound items can be unloaded from the shuttle to the AFC to replenish the AFC while the AFC is airborne.

19. The non-transitory computer-readable storage medium of claim 17, wherein the instructions when executed by the processor further cause the processor to instruct the shuttle to at least:  
 receive a plurality of outbound items to be transported from the AFC while the AFC is airborne, wherein the outbound items include at least one of overstock inventory, transshipment inventory, damaged inventory, waste, materials handling equipment, or a human; and  
 depart the AFC while the AFC is airborne.

20. The non-transitory computer-readable storage medium of claim 17, wherein the instructions when executed by the processor further cause the processor to instruct the UAV to at least:  
 navigate to the delivery location and disengage the item at the delivery location; and  
 navigate from the delivery location to a ground-based materials handling facility.

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